

POLITECNICO DI MILANO



SONA

GAME DESIGN DOCUMENT

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Videogame Design and Programming

November 9, 2018

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1 Overview and vision statement

1.1 Introduction

Sona is a third person 3D game for PC/Mac where you're asked to find out a way to escape from a place you don't know and where you're locked in. Use your super powers and your mind to avoid guards, solve puzzles and discover all the secrets that cover the entire game.

1.2 Description

Jack wakes up in a dark room he never saw before. Two strangers are staring at him curiously. They are Charlie and Hannan. Brother and sister. Like Jack they woke up in that room without remembering anything. Charlie's 14 while Jack and Hannah are both 18.

The two siblings aren't common people: Charlie has the incredible power to pass through the walls while his sister is able to become invisible. Jack can't believe it.

He starts asking himself who Charlie and Hannah are and why do they have superpowers? Can he trust them?

Jack glimpses a dim light at the end of the room. It has the shape of a door, it's a door. It's locked. Why are they locked in? How can they escape from it? Who wants them to be there and why?

1.3 Genre

Sona is a third person 3D puzzle/adventure game

2 Audience, platform, and marketing

2.1 - Target audience

2.2 Platform

Sona is designed to be played on a PC or Mac using keyboard or a joystick.

2.3 ? Key features

1. **Superpowers:** characters have superpowers that player can use to interact with the world and other characters.
2. **Multi-characters:** Player has the possibility to control three different characters, one at a time, and use their abilities to solve puzzles. Let characters cooperate together to manage to find a way to escape.
3. **Interesting story and mysteries:** during the game, player will find out little by little what happened to Jack, Charlie and Hannah: where they are and why, how to escape, etc...

2.4 - Feature comparison

3 Gameplay

3.1 Overview

Find out a way to escape from a place you don't know and where you're locked in. Use your super powers and your mind to avoid guards, solve puzzles and discover all the secrets that cover the entire game.

3.2 - Gameplay description

3.3 Controls

3.3.1 Interfaces

- Main menu:
 - "Start new game"
 - "Load Game"
 - "Select Level"
 - "Settings"
- Settings:
 - "Music volume"
 - (Language)
 - (Controls)
 - (Video)
- Pause screen:
 - "Resume"
 - "Restart from last checkpoint"
 - "Settings"
 - "Quit"
- Game UI:
 - Change character
 - Character movement
 - Use power
 - Call mates (quick press: call nearby characters, long press: call all characters)
 - Collect/Discard item
 - Use item
 - (Jump)
 - Camera movement
 - Pause

3.3.2 Rules

1. If a guard reach you, you loose and restart from last checkpoint
2. If a guard see you, he/she starts to chase you
3. If an alarm rings all guards move into the room the sound come from
4. Characters power:
 - Invisibility: invisible to all characters and environment elements (cameras). "Call mates" deactivated. Usable for a limited amount of time.
 - Dash: move you forward of a fixed distance with the restriction that you have to see the destination. During the movement you are able to avoid any obstacles but you can be seen.
 - Slow down time: for a limited amount of time you can slow down time. Only the character using the power maintain the same speed.

3.3.3 Scoring/winning conditions

At least one character reaches the end of the level

3.4 - Levels

3.4.1 - Tutorial / Level 1

3.4.2 - Intermediate level

3.4.3 - Final level

3.5 - Flowchart

4 Characters

4.1 Player characters

4.1.1 Jack

He's a normal human at the beginning but he'll start to develop superpowers during the intermediate level. He will be able to control time, slowing down all things around him.

4.1.2 Hannah

Hannah is one of the two survivors who developed superpowers, in fact she has the ability to become invisible. Player can active her power by pressing a button. She stays invisible for a maximum of X seconds (example, 5 seconds) or until player repress the button.

4.1.3 Charlie

Charlie is the other survivor with powers: he can transport himself few meters forward going through every obstacle he encounters. Press a button to active his power.

4.2 Non player characters

4.2.1 Dr. James Dertham

He's the scientist working at SONA project. He put Jack, Charlie and Hannah in a dark room inside a navy lab to study their bodies and their abilities in order to find a way to replicate the effects of his bomb on other people.

4.2.2 Guards

These characters oversee all corridors of the navy lab and try to stop Jack, Charlie and Hannah in their attempt to escape.

5 Story

5.1 Synopsis

Dr. James Dertham is a scientist who's working on a new kind of energy reactor for European countries in a project called SONA (Super Optimized Neutrins Acceleration). During a test in a remote lab something goes wrong. The silent storm of death hits the nearby small village killing all of the inhabitants except three people and leaving behind a faint radiation. The survivors are found by the army and they are confined in a secret lab to investigate how they survived the radiation. They wake up in a dark room and they feel strange...

5.2 Backstory

Jack is Dr Dertham's son and was employed in the lab with him. They had a dangerous experiment planned but deadline force them to take it before all required pre-tests were completed. So Dr. Dertham gave all the employees a licence day and did the experiment with his son. Jack was near the energy source and his father was operating on the console further away. Meanwhile Hannah and Charlie were robbing the local bank. While their gang were holding hostages on the ground level they were in the caveau picking the locks on the safe. When the death storm is released Jack survived because he was in the eye of the storm, while Hannah and Charlie were protected in the caveau. The survivors are found by the army and they are confined in a secret lab on a ship to investigate how they survived the radiation.

5.3 Complete story

Jack wakes up in a mostly dark room with Charlie and Hannah staring at him. They tell him that they don't know why they are there, but they discovered to have superpowers once awake. Jack has lost his memory. Jack has no superpower at the beginning, but during the course of the game he starts to develop one. In the final level the three guys reach the place where the findings on the lab site were stored. The objects include some taken from Dr. Dertham's office. They find out the reason why they are there, the name of the marshall who put them there and all the story behind Dr. Dertham, his son and the SONA project. While Jack and Hannah are investigating the last room, Charlie opens a double door (decontamination room) which leads to the bridge of a warship where marshall Derrick Stone is waiting for them. The game ends with the marshall welcoming them: Jack, without you this wouldn't have happened. It's better now to put those powers to use.

5.4 Narrative devices

- Documents/newspaper
 - photo with Jack and Dr. James Dertham
 - Economic Dossier about SONA project.
 - Dossier about the unusual activity before the experiment
 - * Newspaper about a criminal gang (number of gang members+2)
 - * Report about robbery (number of dead gang members, without Hannah and Charlie)
 - Jack's, Hannah and Charlie subject folder (with radioactivity levels)
 - Documents in the SONA room
 - * Dr. Dertham data about a dangerous experiment that should have been conducted two weeks later after more tests.

- * A Dr. Dertham's note about a licence day for all employees
- * Details of experiment to be conducted by two people, one near the energy source and the other further away.

- Dialogs (?)

5.5 Subplots

- Charlie and Hannah survived the bomb because they were rubbing a bank caveau.
- Jack was the one who failed the experiment but he was in the eye of the storm so he got a superpower and lost his memory. His superpower is related on failure emotion: stronger is his emotion stronger will be his power. His father is Dr. Dertham
- Dr Dertham died during the accident.

6 World

6.1 - Overview

The game is set on a platform surrounded by sea, which hosts the laboratory used for the studies on the main characters. The player will explore various rooms trying to get outside.

6.2 - Key locations

- Holding cell: the cell where the game starts. The characters were closed in there.
- Doctor's office: the characters will arrive there during their exploration. In the office they will find out the story behind their kidnapping

6.3 - Travel

The characters will only move by foot.

6.4 - Physical objects

The objects in the game are divided into:

- Obstacles: they include walls, doors and other unmovable objects that limit the movements of the player
- Movable objects: they are all kind of objects that can be moved. They can still partially limit, or otherwise modify, the movements of the player, but they can also be involved in the solution of the puzzles
- Items: objects that can be picked up and used. They don't affect the movements of the characters
- Characters: These objects have their own movement capabilities and can affect the game in different ways. If they don't trigger a reaction, they act as moving obstacles

6.5 - Time

The story is told linearly from the beginning to the end and doesn't include flashbacks or anticipations. The flowing of time can be affected by powers in the game

7 Media list

7.1 - Interface assets

- Main Menu
- Pause Screen
- Characters icons
- Powers icons
- Item icons

7.2 - Environments

- Box
- Lamp
- Door
- Blinded door
- Bed
- Chair
- Table
- Floor
- Wall

7.3 - Characters

- Jack
- Hannah
- Charlie
- Dr. James Dertham
- Guard

7.4 - Animation

- Walk
- Jump
- Run
- Power 1
- Power 2
- Power 3

- Take object
- Use object?
- Use Lamp
- Punch?

7.5 - Music and sound effects

- Background music
- Main menu music
- Select
- Footsteps
- Jump
- Punch?
- Door
- Power 1
- Power 2
- Power 3